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10/008,657	11/09/2001	Jeffrey Oliver	100.339US01	7351

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EXAMINER	
ROBERTS, BRIAN S	

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 08/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/008,657	OLIVER ET AL.	
	Examiner	Art Unit	
	Brian Roberts	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 May 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24 and 47-54* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-23 and 47-53* is/are rejected.

7)☐ Claim(s) *24 and 54* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

- Applicant's Amendment filed on 5/24/2006 is acknowledged.
- Claims 47-54 have been added.
- Claims 1-24 and 47-54 remain pending.

Claim Objections

1. Claim 3 is objected to because of the following informalities:

   - In line 3 of claim 3, "controllers adapted to a coupled to the" should read -- controllers coupled to the--.

   Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 2,12, and 20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 2, 12, and 20 specify that the performance information includes error counts. What are the different kinds of errors that are being counted?

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-4, 6-12,14-23, 47-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ganesan et al. (US 5727160) in view of Harris (US 5946373) in view of the admitted prior art.

- In reference to claims 1 and 47-49

In Figure 15, Ganesan et al. teaches a system that includes:

- An Input/Output port manager (IOPM 612) (*hardware monitor*) connected to the IO Cards (614) (*associated hardware component*) frequently polls (*collects*) the IO Cards (614) to determine T1 line failures and alarms conditions (*performance information*) (column 15 lines 66-67)
- An IOPM (612) (*hardware controller*) adapted to perform switchover, which inherently includes communicating a change message, (*selectively communicate change messages*) to a backup T1 cards (*hardware components*) in response to alarm conditions (*performance information*) (column 16 lines 2-6)

Ganesan et al. does not explicitly teach a system information database adapted to refresh based on the collected performance information and generate system status information.

In Figure 1, Harris teaches an alarm database (103) (*system information database*) that stores active fault alarms for equipment (*associated hardware components*). The alarms are inherently generated in response to alarm conditions (*performance information*). New alarms are added (*refresh database*) to the database to form (*generate*) a database of active alarms (*system status information*). (column 4 lines 15-24)

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify system of Ganesan et al. to include an alarm database (*system information database*) where new alarms are added (*refresh database*) to the database to form (*generate*) a database of active alarms (*system status information*) as taught by Harris et al. because it allows the IOPM (*hardware monitor*) to store the status and active alarms of the IO Cards and I/O ports in a database in order to facilitate the access and reporting of the status the IO Cards and I/O ports and events to the OMC (70) or IOPM (*hardware controller*).

The combination of Ganesan et al. and Harris does not explicitly teach the IOPM (*hardware controller*) utilizing the database of active alarms (*generated system status information*).

The admitted prior art teaches a hardware controller polling the database for changes in configuration. (paragraph [0023])

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the system of Ganesan et al. and Harris to include the IOPM (*hardware controller*) polling the database as taught by the admitted prior art for active alarms (*system status information*) because it would allow the IOPM (*hardware controller)* to perform switchover to a backup T1 cards (*hardware components*) when there is a new active alarm in the alarm database (*system information database*).

- In reference to claims 2,12, and 20, as best understood

The combination of Ganesan et al., Harris, and the admitted prior art teaches a system that covers substantially all limitations of the parent claim. Ganesan et al. further teaches the performance information including alarm conditions (*alarm indications*). (column 16 lines 2-4)

- In reference to claims 3,11,19, 23, and 53

The combination of Ganesan et al., Harris, and the admitted prior art a system that covers substantially all limitations of the parent claim. Ganesan et al. further teaches the IOPM (612) (*hardware controller)* inherently includes a change response generator coupled to a hardware port controller for performing switchover for backup T1 cards in response to alarm conditions or an operator request. (column 16 lines 4-6)

- In reference to claim 4

The combination of Ganesan et al., Harris, and the admitted prior art teaches a system that covers substantially all limitations of the parent claim. The combination of Ganesan et al. and Harris further teaches the IOPM (*hardware monitor*) storing the status and active alarms (*performance information*) of the IO Cards and I/O ports in a database in order to facilitate the access and reporting the database of active alarms (*system status information*) to the OMC (70) (remote unit) (column 16 lines 1-4)

- In reference to claims 6-8,14-15,17-18, 22, 50

The combination of Ganesan et al., Harris, and the admitted prior art teaches a system that covers substantially all limitations of the parent claim. Ganesan et al. further teaches hardware components comprising T1 cards. (column 15 lines 66-67)

The combination of Ganesan et al., Harris, and the admitted prior art does not teach E1 cards or the T1 cards including a driver.

Official Notice is taken that an E1 card is the European equivalent to a T1 card and that each card contains a driver.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the system of the combination of Ganesan et al., Harris, and the admitted prior art to include E1 cards or the T1 cards containing drivers because it would allow the system to be deployed in Europe and conform to the European communication standards and allow the T1 cards to have the necessary software to function.

- In reference to claim 9

The combination of Ganesan et al., Harris, and the admitted prior art teaches a system that covers substantially all limitations of the parent claim. In Figure 15, Ganesan et al. further teaches an interface (*application interface*) between the IOPM (612) and T1 cards.

- In reference to claim 10 and 51-52

In Figure 15, Ganesan et al. teaches a local transmission system that includes:

- An Input/Output port manager (IOPM 612) (*detection device*) adapted to identify alarms conditions (*alarm information*) within the local transmission system and to identify received alarm conditions (*alarm information*) from IO Cards (614) (*associated remote units*) (column 15 lines 66-67)
- An IOPM (612) (*hardware controller*) adapted to selectively perform switchover, which inherently includes selectively communicating a change message (*communicate change messages*), to a backup T1 cards (*hardware components*) in response to alarm conditions (*alarm information*) (column 16 lines 2-6)

Ganesan et al. does not explicitly teach a system information database adapted to store system status information and to refresh based on alarm information.

In Figure 1, Harris teaches an alarm database (103) (*system information database*) adapted to store active fault alarms (*system status information*). The alarms

are inherently generated in response to alarm information. New alarms are added (*refresh database*) based inherently on alarm information. (column 4 lines 15-24)

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify system of Ganesan et al. to include an alarm database (*system information database*) adapted to store active fault alarms (*system status information*) and adapted to refresh based on alarm information as taught by Harris et al. identified by the IOPM (*detection device*) because it allows the IOPM (*hardware monitor*) to store the status and active alarms of the IO Cards and I/O ports in a database in order to facilitate the access and reporting of the status the IO Cards and I/O ports and events to the OMC (70) or IOPM (*hardware controller*).

The combination of Ganesan et al. and Harris does not explicitly teach the IOPM (*hardware controller*) communicate the change messages based the database of active alarms (*generated system status information*).

The admitted prior art teaches the hardware controller polling the database for changes in configuration. (paragraph [0023])

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the system and method of communicating change messages of Ganesan et al. and Harris to include the IOPM (*hardware controller*) polling the database as taught by the admitted prior art for active alarms (*system status information*) as taught by the prior art because it would enable the IOPM (*hardware controller)* to perform switchover to a backup T1 cards (*hardware components*) when there is a new active alarm in the database.

- In reference to claim 16

In Figure 15, Ganesan et al. teaches a transmission system that includes:

- An Input/Output port manager (IOPM 612) (*hardware module*) adapted to frequently poll (*collects*) IO Cards (614) (*associated hardware component*) to determine T1 line failures and alarms conditions (*performance information*) and interfaced to the IO Cards (614) (column 15 lines 66-67)
- An IOPM (612) (*hardware module*) adapted to selectively perform switchover, which inherently includes selectively communicating a change message (*communicate change messages*), to a backup T1 cards (*hardware components*) in response to alarm conditions (*alarm information*) (column 16 lines 2-6)

Ganesan et al. does not explicitly teach a system information database interfaced to the An IOPM (612) (*hardware module*) adapted to refresh based on alarm information and generate store system status information and.

In Figure 1, Harris teaches an alarm database (103) (*system information database*) adapted to add new alarms (*refresh database*) based inherently on alarm conditions (*performance information*). (column 4 lines 15-24)

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify system of Ganesan et al. to include an alarm database (*system information database*) adapted to add new alarms (*refresh database*) based inherently on alarm conditions (*performance information*) as taught by Harris et al. and interfaced

to the IOPM (612) (*hardware module*) because it allows the IOPM (*hardware module*) to collect and store the status and active alarms of the IO Cards and I/O ports in a database in order to facilitate the access and reporting of the status the IO Cards and I/O ports and events to the OMC (70).

The combination of Ganesan et al. and Harris does not explicitly teach that the IOPM (*hardware module*) communicates the change messages based on the database of active alarms (*generated system status information*).

The admitted prior art teaches the hardware controller polling the database for changes in configuration. (paragraph [0023])

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the system and method of communicating change messages of Ganesan et al. and Harris to include the IOPM (*hardware controller*) polling the database for active alarms (*system status information*) as taught by the admitted prior art because it allows the IOPM (*hardware module)* to perform switchover to a backup T1 cards (*hardware components*) when there is a new active alarm in the database.

- In reference to claim 21

In Figure 15, Ganesan et al. teaches a system that includes:

- An Input/Output port manager (IOPM 612) (*transport hardware monitor*) connected to the IO Cards (614) (*associated transport hardware components*) frequently polls (*collects*) the IO Cards (614) to determine T1 line failures and alarms conditions (*performance information*) (column 15 lines 66-67)

- An IOPM (612) (*transport hardware controller*) adapted to perform switchover, which inherently includes communicating a change message, (*selectively communicate change messages*) to a backup T1 cards inherently containing a driver (*hardware driver*) in response to alarm conditions (*performance information*) (column 16 lines 2-6)
- Wherein the IOPM (612) polls (queries) the IO Cards (614) inherently containing a driver (hardware driver) to determine T1 line failures and alarm conditions
- Wherein the IO Cards (614) inherently containing a driver (hardware driver) are each adapted to communicate with the IOPM (612) (*transport hardware controller*) via an application interface

Ganesan et al. does not explicitly teach a system information database adapted to generate system status information.

In Figure 1, Harris teaches an alarm database (103) (*system information database*) that stores active fault alarms for equipment (*associated hardware components*). The alarms are inherently generated in response to alarm conditions (*performance information*). New alarms are added (*refresh database*) to the database to form (*generate*) a database of active alarms (*system status information*). (column 4 lines 15-24)

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify system of Ganesan et al. to include an alarm database (*system information database*) where new alarms are added (*refresh database*) to the database

to form (*generate*) a database of active alarms (*system status information*) as taught by Harris et al. because it allows the IOPM (*transport hardware monitor*) to store the status and active alarms of the IO Cards and I/O ports in a database in order to facilitate the access and reporting of the status the IO Cards and I/O ports and events to the OMC (70) or IOPM (*transport hardware controller*).

The combination of Ganesan et al. and Harris does not explicitly teach the IOPM (*hardware controller*) utilizing the database of active alarms (*generated system status information*).

The admitted prior art teaches a hardware controller polling the database for changes in configuration. (paragraph [0023])

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the system of Ganesan et al. and Harris to include the IOPM (*hardware controller*) polling the database as taught by the admitted prior art for active alarms (*system status information*) because it would allow the IOPM (*hardware controller)* to perform switchover to a backup T1 cards (*hardware components*) when there is a new active alarm in the alarm database (*system information database*).

6. Claims 5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ganesan et al. (US 5727160) in view of Harris (US 5946373) in view of the admitted prior art, as applied to the parent claims, and further in view of Chang et al. (US 6167279)

- In reference to claims 5 and 13

The combination of Ganesan et al., Harris, and the admitted prior art teaches a system that covers substantially all limitations of the parent claim.

The combination of Ganesan et al., Harris, and the admitted prior art does not teach an embedded operations channel.

In Figure 1, Chang et al. teaches an embedded operations channel between a radio port (3) and radio port controller unit (4). (column 4 lines 8-11)

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the system of the combination of Ganesan et al. and Inoue to include a embedded operations channel as taught by Chang et al. because the embedded operations channel provides a specific administration and maintenance channel to transmit system status information and alarm conditions.

Allowable Subject Matter

7. Claim 24 and 54 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

8. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Roberts whose telephone number is (571) 272-3095. The examiner can normally be reached on M-F 10:00-7:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BSR
08/03/2006

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